

## **Methodology Used to Determine Surplus Emission Reductions in the Carl Moyer Program**

The Carl Moyer Program (Program) was created by legislation approved in 1999 to provide grants to offset the incremental cost of projects that reduce covered emissions from covered sources in California. The Health & Safety Code (H&SC) directs the Air Resources Board (ARB) to oversee the Program by managing program funds; producing guidelines, protocols, and criteria for covered vehicle projects; and developing methodologies for evaluating project cost-effectiveness. One aspect of developing guidelines is to determine project eligibility that ensures emission reductions which are considered “surplus” (H&SC §44287(a)). The following describes the methodology that ARB staff uses to determine whether project categories results in surplus emission reductions.

Emission reductions are considered surplus when they are neither claimed by or subject to any “local, state, or federal statute, rule, regulation...” (H&SC §44281(b)). ARB is required by federal and state law to regulate harmful emissions from diesel vehicles and equipment in order to ensure safe, clean air and reduce exposure to toxic air contaminants. As a result, ARB has adopted a number of regulations designed to reduce emissions from engines operating within California by ensuring that the newest, cleanest technology is purchased within a prescribed amount of time. The Program is able to fund projects with emission reductions that are not currently claimed by any regulation.

### **Methodology Used to Determine Whether Emission Reductions are Surplus**

There are two components that ARB staff uses to determine whether a project is considered to achieve surplus emission reductions. First, staff reviews the compliance dates for a regulation. Second, staff analyzes the compliance quantification that forms the basis of the emission benefit analysis for the particular regulation. The following is a description of how each component is employed throughout this analysis.

#### **Component 1**

Staff first analyzes each adopted regulation to determine the compliance dates of any affected engines. Compliance dates are developed by regulatory staff to ensure that emission reductions occur within a certain timeframe. For example, regulatory compliance dates are developed based upon a number of criteria including but not limited to fleet size, engine horsepower, vocational use of the vehicle/equipment..

#### **Component 2**

Staff then determines the emission benefits claimed by each regulation. To be eligible for Moyer funding, the emission benefit of a project cannot have already been claimed in a regulatory emission benefit analysis. These analyses take into account any benefits resulting from any action taken by the owner in order to meet the requirements of the regulation, even if the action is not specifically required by the regulation.

For example, the emission benefit analysis used in the Statewide Truck & Bus Regulation (Regulation) resulted in emission benefits beyond what is actually required by the Regulation. The Regulation requires only retrofits for some model years during the first few compliance deadlines, yet the emission benefit analysis reflected that some of these trucks would be replaced instead of being retrofitted, due to a variety of factors, including the remaining useful life of the truck and the ancillary benefits of a newer truck. Therefore, while the Regulation specifically requires only particulate matter (PM) reductions from a filter, the emission benefit analysis also quantified PM and oxides of nitrogen (NOx) reductions associated with the truck replacements. Once a regulation claims an emission benefit for a particular project, then that project is no longer producing surplus emissions that can be funded by the Moyer Program.

### **Development of Moyer Guideline Eligibility Requirements**

After both components are evaluated, incentive staff develops guidelines that ensure eligible projects are completed far enough in advance to ensure that there is not an overlap. Currently, three years is the standard minimum project life unless otherwise directed by statute or the Board.

### **Future Actions**

As a result of regulations, Moyer staff has developed this methodology to ensure that emission reductions are surplus in order to meet the requirements of the California Health & Safety Code. Moyer staff will continue to work with the regulatory sections within ARB and stakeholders to identify the impacts on surplus emissions as regulations are developed or revised.